'92," and is credited to the joint authorship of Dr. Robinson and Mr. H. E. Seaton. Thirty-four new species and varieties are described.

Mr. J. Christian Bay, of the Missouri Botanical Garden, has just published a bibliography of the tannoids, being issued in advance from the fifth annual report. Such publications are exceedingly useful, and become necessary for the preparation of monographs. It will be remembered that the same author has previously published a similar bibliography of inulin.

A CHECK LIST of the plants contained in the sixth edition of Gray's Manual has been compiled by John A. Allen and issued from the Herburum of Harvard University. The species have serial numbers, including the varieties, and show a total of 3,781. An appendix attempts to enumerate the additional plants found within the limits of the manual since the issue of the sixth edition, bringing the total number to 3,937.

PROFESSOR A. S. HITCHCOCK has published a Key to Kansas trees their winter condition reprinted from the 8th biennial report of the Kansas State Board of Agriculture.

## OPEN LETTERS.

## The bibliography of American botany.

With respect to a yearly bibliography and reference-work of Amerbotanical literature, I have been asked to submit the following points to fellow-workers:

American botanical literature is playing a very important rôle mour science. Therefore it will be a very necessary step to take to publish a work similar to Just's Jahresbericht which could furnish:

(a) A list of papers and works in every department of botany, absolutely complete.

(b) A review of each of these papers and works, short and perfectly

A work of this kind ought to be published every year. In order to bring forth such a work, the importance of which and not be asserted, it ought to be published and sold separately, and not be assimilated by any report or periodical. In the latter case it the Smith comit botanists be inaccessible. With special reference to the Smithsonian publications I will state that in other countries these American based and hardly ever seen in private libraries. A work American botanical literature should be made accessible to every botanist all the world over.

4 Therefore, the publishing should, as far as the business management goes, be in the hands of a publisher.

5. The work ought to be undertaken by a committee, and the liter

ature treated after some such plan as the following:

1. Periodicals, Reports of societies. 2. Text- and hand-books nomenclature. 3. Classification. a, Phanerogamæ. b, Cryptogamæ. 4. Floras; a, of North America, b, of other countries. 5. More phology. 6. Anatomy. 7. Physiology (including Biology and Phaenology). 8. Microscopy and Technique. 9. Biography. 10. Travels. 11. Horticultural botany. 12. Agricultural botany. 13 Forest botany. 14. Medical and Pharmaceutical botany. 15 Varia.

6. The editor of the work should be assisted by authors sending him a reprint of each of their papers. He should distribute these among the members of the committee for reviewing, and the reprints ought to become the property of the members to whom the editor sends them.

7. Not later than April each year the editor should have the reviews

in hand so that the whole work could appear in July.

The details of this plan are easily understood. All of us know how valuable Just's Jahresbericht is, owing to the reviews, and how little attention it pays to American literature. Of course we must appreciate that such a work as has been planned above is an international affin and for this reason especially, I have not the least doubt that it would

pay the publisher well.

I should be glad to give some of my time to such a work, doing the purely bibliographical work, and taking care of the reviews of the liter ature bearing on the subjects named above under 6, 7, and 8 would like to associate with fellow-workers, and form a committee which could bring the matter before the meeting at Madison. Owing to the amount of material that I have brought together, it would be possible by properly attending to the matter to issue a report for 1892 this fall -J. CHRISTIAN BAY, Missouri Botanical Garden.

## NOTES AND NEWS.

THE LINNÆAN medal was recently presented to Professor Oliver for many years curator of the herbarium at Kew.

MR. D. T. MACDOUGAL, recently assistant in botany at Purdue Unversity, has been appointed instructor in vegetable physiology at the University of Minnesota.

DR. PAX, of the University of Berlin, has been appointed Director of the Botanic Gardens at the University of Breslau, the position make vacant by the death of Dr. Prantl.

THE UNIVERSITY of Minnesota has established an inland biological station at Gull Lake. The lake is in Cass county, Minnesota, and the station is reached from Brainerd.

MISS ALICE EASTWOOD, formerly of Denver, Colo., has succeeded Mrs. Katherine Brandegee, as curator of the Herbarium of the California Academy of Sciences, and as acting editor of Zoe.—Zoe.